REMARKS

Restrictions

The claims of the present application are subject to a restriction requirement, and in a telephone conference with the Examiner on May 18, 2009, Group I (claims 16-19) was elected for prosecution in this application. Applicant hereby confirms the election. Applicant expressly reserves the right to file claims relating to the non-elected inventions in one or more divisional applications.

Claim Rejections

In the Office Action, the Examiner rejected Claim 16 as being unpatentable over Japanese Patent No. 11-080222 (Tsujimoto et al.).

Applicant traverses the Examiner's rejection and respectfully requests reconsideration in light of two intervening opinions from the United States Court of Appeals for the Federal Circuit. In *Sanofi-Synthelabo v. Apotex, Inc.*, 470 F.3d 1368 (Fed. Cir. 2006), the Federal Circuit considered whether a prior-art patent anticipated the claim of the patent-in-suit, which was for a bisulfate salt. The prior-art patent recited the free base and did not describe the enantiomers or the salt of the compound of the patent-in-suit. The challenger asserted that the enantiomers and the salt were inherently disclosed. The court noted that the prior-art patent disclosed 21 exemplary compounds, including hydrochloride salts, hydrobromide salts, a sodium salt, an oxalate, a free base, and bisulfates. According to the court, the prior-art patent did not disclose bisulfates as preferred salts. In the prior cases, *In re Petering*, 301 F.2d 676, 133 U.S.P.Q. 275 (CCPA 1962) and *In re Schaumann*, 572 F.2d 312 (C.C.P.A. 1987), the prior art disclosed a

"pattern of preferences". There being no such preference disclosed in the patent-in-suit in *Sanofi*, the Federal Circuit found no anticipation.

Similarly, in *Eli Lilly & Co. v. Zenith Goldline Pharmaceuticals, Inc.*, 471 F.3d 1369 (Fed. Cir. 2006), the Federal Circuit considered whether a prior-art reference anticipated the claim of the patent-in-suit. According to the court, the prior-art reference made only a broad generic disclosure, and the number of compounds disclosed, including all alternative substituents, numbered in the millions. Therefore, the Federal Circuit found that the prior-art reference did not anticipate the claim of the patent-in-suit.

Applicant believes that the present invention would not have been obvious over Tsujimoto et al. because Tsujimoto et al. does not disclose a catalyst comprising yttrium compound as concrete catalyst of a Group IIIB metal such as the catalyst of the present invention, and the catalyst comprising yttrium compound of the present invention can obtain superior effects compared to the other catalyst of a Group IIIB metal.

In the Office Action, the Examiner asserts Tsujimoto et al. discloses a catalyst comprising a Group IIIB metal. However, Tsujimoto et al. discloses only Neodymium, Praseodymium, Cerium, Lanthanum, Gadolinium, or mixtures of these as concrete catalyst of a Group IIIB metal, but does not disclose yttrium compound. Particularly, Tsujimoto et al. mentions that Neodymium is recited preferably in paragraph 0012.

The high-cis polybutadiene synthesized using the catalyst comprising yttrium compound of the present invention has a higher 1,4-cis structure content compared to one synthesized using

neodymium catalyst. This can be supported by comparing Examples 1 to 7 in the present specification with Examples 1 to 3 in Tsujimoto et al.

Further, the catalyst comprising the yttrium compound for polymerization of conjugated diene according to the present invention causes a higher 1,4-cis structure content compared to the conventional titanium-, cobalt-, and nickel-based catalysts for polymerization of conjugated diene; higher activity on polymerization compared to the neodymium catalytic system containing no methyl alumoxane co-catalyst; and less aluminum residue after polymerization compared to the neodymium catalytic system containing a methyl alumoxane co-catalyst. In addition, the catalyst for polymerization of conjugated diene according to the present invention has higher activity on polymerization, larger ease of handling, and lower catalyst cost compared to catalyst systems of the metallocent type (Nd, Sm, Gd).

In view of the above remarks, Applicant respectfully submits that the claims of the present application should be allowed. Should the present claims not be deemed adequate to effectively define the patentable subject matter, the Examiner is respectfully urged to call the undersigned attorney of record to discuss the claims in an effort to reach an agreement toward allowance of the present application.

Respectfully submitted,

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By: _____

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